**Feeding of *Humani smartis***

**Background**

Every living thing has unique characteristics to help it survive. Sometimes the environment changes and living things that can change to better suit the new environment have a greater chance of surviving.

Every living thing has a variety of adaptions that are suited to its specific habitat. Generally speaking there are two categories for living things: predator or prey. Living things have adapted to either elude predators or capture prey. For example, herbivores have teeth with broad, flat surfaces that are good for grinding plant material. Carnivores have sharp claws for grasping prey, speed for catching prey and excellent hearing and eyesight. Sometimes living things have adaptions to protect them from being eating by predators. For example, a turtle has a protective shell or a centipede may have bright colours to warn predators it is poisonous.

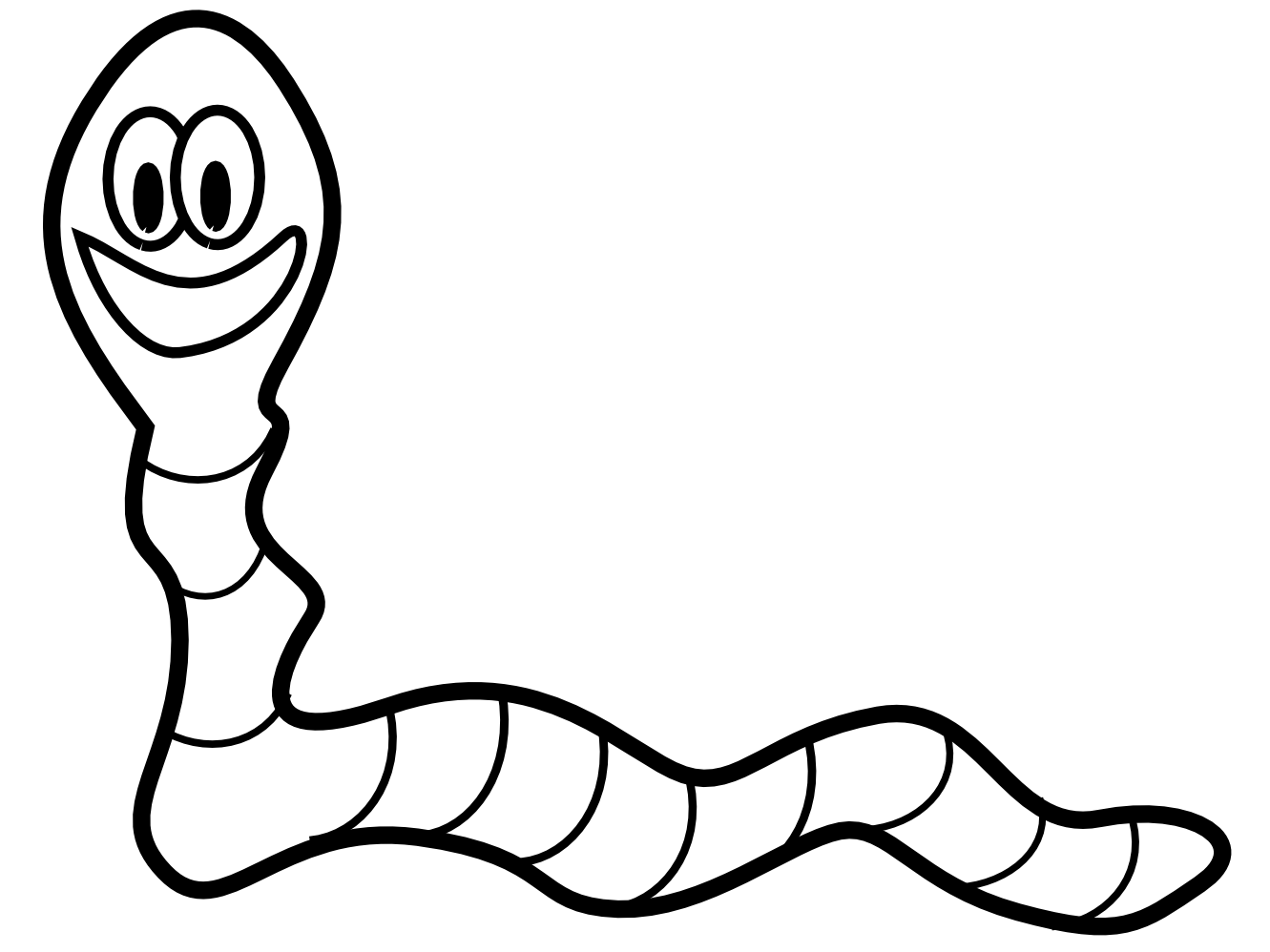
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**Activity Overview**

In this activity, you are the predator called *Humani smartis*. You like to eat a certain kind of worm-like food called *Wormy toothapickus* that can be found in grassy habitats. The food comes in a variety of colours. To collect the food you use your hands and to eat the food you hold it in your hand.

Your life cycle is based on collecting food in 1-minute intervals. If you can collect at least 8 worms in 1 minute you will survive. If you get less than 8, you die. In this activity you will have to forage in the grassy habitat for food. You must return to your starting point before the 1-minute interval is over. If you do not return, you have died. If you return without 8 or more worms, you are also dead.

After each 1-minute interval you will need to record the following information.



# red worms captured

# blue worms captured

# green worms captured

# orange worms captured

When you return to the class, we will analyze the data further.

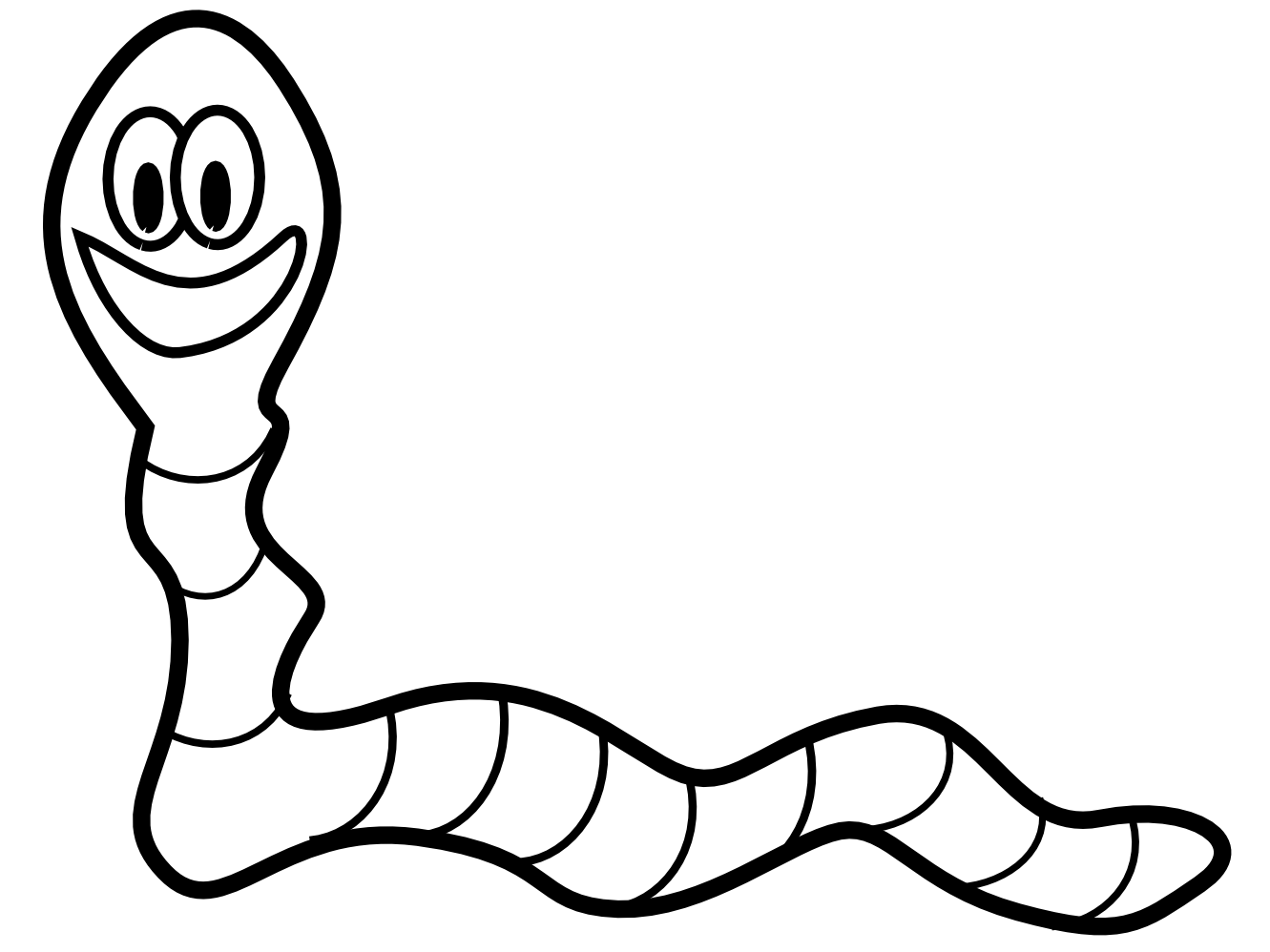
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*Data Collection*

**Part 1**

At the end of each 1-minute interval, record the colour and number of *Wormy toothapickus* you collected.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Interval 1 | Interval 2 | Interval 3 | Interval 4 | Interval 5 | Total |
| # Red Worms |  |  |  |  |  |  |
| # Blue  Worms |  |  |  |  |  |  |
| # Green  Worms |  |  |  |  |  |  |
| # Orange  Worms |  |  |  |  |  |  |
| Total  Captured |  |  |  |  |  |  |



**Part 2**

Record the following information

|  |  |
| --- | --- |
| Total # red worms in the habitat \_\_\_\_\_\_  Total # blue worms in the habitat \_\_\_\_\_\_  Total # green worms in the habitat \_\_\_\_\_\_  Total # orange worms in the habitat \_\_\_\_\_\_ | Total number of worms you captured \_\_\_\_\_\_  Total number of worms captured  by the class \_\_\_\_\_\_  Total number of worms not captured \_\_\_\_\_\_ |

**Analysis**

1. Create a line graph showing how many of each colour of worms you captured each 1-minute interval. This graph will have four lines; one for each colour of worm.

2. Create a bar graph on graph paper that shows your total number of captured worms for each colour.

3. Create a second bar graph showing the percent captured by the class for each colour of worm.

**Summary**

4a. Make a claim as to the best colour of *Wormy toothapickus* to survive in the grassy habitat.

4b. What evidence do you have to support your claim?

4c. Give at least one justification using your evidence to support your claim.